REMARKS

The Examiner has indicated that claims 1-11 and 26-32 are all the claims pending in the application. However, claim 26 was canceled in the Amendment under 37 C.F.R. § 1.116 filed on October 20, 2005. Therefore, claims 1-11 and 27-32 are all the claims pending in the application. By this Amendment, Applicant amends claims 1, 5, 8, 28, and 32 to further clarify the invention.

In particular, claim 1 is amended to further clarify that the control unit, as the name suggests, controls the operations of the automation system. Since claim 1 already recited "a control unit of an automation system," this amendment is viewed as a clarifying amendment and not a narrowing amendment.

Claims 5 and 8 are amended to further clarify the term "automation system". The amendment to claims 5 and 8 is fully supported by the specification. For example, the specification discloses a numeric control unit and a robot control unit (page 1, lines 9 to 12), which are associated with automation systems in the manufacturing process. Furthermore, by way of an example, Figs. 2A and 2B describes operations of the automation system that relates to valves. Valves are common components of a manufacturing and production process.

Preliminary Matter

As a preliminary matter, Applicant thanks the Examiner for indicating acceptance of the drawings filed on February 20, 2001.

Summary of the Office Action

The Examiner withdrew the previous grounds for rejection. The Examiner, however, found new grounds for rejecting the claims.

Prior Art Rejections

Claims 1-11 and 27-32 are rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over U.S. Patent No. 5,715,393 to Naugle (hereinafter "Naugle") in view of U.S. Publication No. 2003/0120775 to York (hereinafter "York"). Applicant respectfully traverses these grounds of rejection in view of the following comments.

Of the rejected claims, only claims 1, 5, and 8 are independent. To begin, independent claim 1, among a number of unique features, recites: "wherein the control unit monitors and controls operation of the automation system and in response to a fault detected in the automation system, generates the e-mail message." The Examiner alleges that claim 1 is directed to a system operable to generate a message related to a control unit of an automation system and is obvious in view of Naugle and York. In particular, the Examiner alleges that Naugle's status message sent by the monitoring device is equivalent to the message sent by the control unit, as set forth in claim 1. Moreover, the Examiner alleges that York discloses a management console sending an email to the user when a fault is detected (*see* pages 2-3 of the Office Action). Applicant respectfully disagrees.

For example, in the illustrative, non-limiting embodiment, it is disclosed that the control unit controls the operations of the automation system, which is a system of a manufacturing or production process that has valves, sensors, and so on (*see e.g.*, Figs. 2A and 2B). When a predetermined threshold that relates to the operation of the automation system is reached or when

a fault in the operation of the automation system occurs, the control unit generates an e-mail message and transmits it to the receiving device, which responds to this message. That is, in the exemplary, non-limiting embodiment, the e-mail message is generated in response to the operation of the automation system by the control unit. Accordingly, unlike the conventional techniques where separate monitoring systems are provided (see page 1, lines 14 to 16 of the specification), no additional, separate monitoring systems are required.

Naugle, on the other hand, only discloses the monitor computer (alleged control unit) monitoring the status of the target computer (Fig. 2; col. 1, line 60 to col. 2, line 4). That is, Naugle only discloses that the monitor computer periodically sends status messages requesting information from the target computer (col. 4, line 9 to col. 5, line 53). In other words, the target computer reports the status of its software processes to the monitor computer. Naugle, however, fails to disclose or suggest the monitor computer controlling an automation system (alleged network 37) or the target computer. That is, in Naugle, a separate monitoring system is provided (the monitor and target computers) for monitoring the network. In short, Naugle is no different from the conventional techniques, where a separate monitoring system is required.

York fails to cure the deficient disclosure of Naugle. York discloses a management console 100, which monitors the network for predefined rules, and when a particular rule is met, the console 100 sends a notification to a remote device (¶¶ 30-33). York, however fails to disclose or suggest the management console 100 controlling the network (alleged automaton system). The management console 100 of York only monitors the network and its devices based on the rules set by the user. That is, the management console does not control the operations of

the network. In other words, York, similar to Naugle, discloses a separate monitoring system. In Naugle, there is no disclosure or suggestion that the console 100 can be used to influence or control the operations of the network. Accordingly, York fails to cure the deficient teachings of Naugle.

Moreover, the Examiner alleges that one of ordinary skill in the art would have been motivated to combine York with Naugle to facilitate network management (*see* page 3 of the Office Action). Applicant respectfully submits that if the references are combined in the manner suggested by the Examiner (the status request message of Naugle is sent in response to a fault detected in the network, as opposed to at a predetermined time), the network management would not be facilitated. On the contrary, if the status request message is sent once the fault is detected, for example for the part where the fault was detected, no response or incorrect information may be received. On the other hand, if a status request is sent about a device or a process unrelated to the detected fault, this clearly does not facilitate management. In short, it is respectfully submitted that one of ordinary skill in the art would not have been motivated to combine the references in the manner suggested by the Examiner.

Therefore, for at least these exemplary reasons, claim 1 is patentable over Naugle and York. It is appropriate and necessary for the Examiner to withdraw this rejection of claim 1. Claims 2-4 and 27-32 are patentable at least by virtue of their dependency.

In addition, dependent claim 28 recites: "the response to the message comprises control commands in a programming language and wherein said control commands influence at least one operation of the automation system." The Examiner alleges that the UNIX command "ping"

in Naugle discloses these unique features of claim 28 (*see* page 6 of the Office Action). However, it is respectfully noted that in Naugle, this command is sent prior to communication between devices (Fig. 2; col. 2, lines 41 to 57) and clearly not in response to the status request message (Fig. 2). In Naugle, the status request message is clearly sent after the command ping. In addition, the command "ping" is a status command and does not influence the operation of the network. York fails to cure the deficient teachings of Naugle. For at least these additional exemplary reasons, claim 28 is patentable over the combined teachings of Naugle and York.

In addition, dependent claim 32 indicates that the control unit is a numerical controller (NC). The combined disclosure of Naugle and York fail to disclose or suggest a numeric controller. Both of these systems only deal with monitoring computer networks and are unrelated to the automation systems and as such do not disclose or suggest a numeric controller NC. For at least this additional reason, claim 32 is patentable over the combined teachings of Naugle and York.

Independent claims 5 and 8, as now amended, among a number of unique features, include some variation of the automation system comprising equipment of a production or a manufacturing process. It is respectfully submitted that both Naugle and York relate to monitoring a computer network and are unrelated to an automation system that includes equipment of a production or a manufacturing process, such as for instance, valves, sensors, cutting machines, packaging machines, and so on. For at least this exemplary reason, it is respectfully submitted that claims 5 and 8 are patentable over the combined disclosure of Naugle

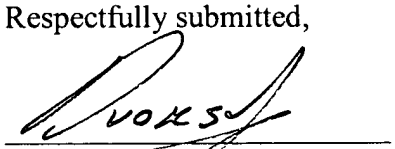
and York. Therefore, Applicant respectfully requests the Examiner to withdraw this rejection of claims 5 and 8 and their dependent claims 6, 7, and 9-11.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Nataliya Dvorson
Registration No. 56,616

Date: February 14, 2006

Attorney Docket No.: Q63062